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Climate Change Adaptation and Development Planning: A Geographical Perspective

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Abstract

Climate change presents irreducible uncertainties which require integrative, strategic, and innovative ways to manage risk. In this context, development planning is often presented as a promising candidate for fundamentally reinforcing key aspects of climate change adaptation. Yet, the construction of narratives underlying the idea of 'planning for climate' remain dominated by the natural sciences and focused on environmental rather than social change. In response, this research suggests that a geographical perspective, i.e. studying the relations between society and the 'natural' environment, can provide valuable insights for examining the potential role of development planning in building integrative ways to manage space under climate change uncertainties. Following the elaboration of a conceptual framework defining the key features of a geographical perspective, the idea of 'planning with climate change' is embraced for appraising the socionatural reality of climate change from which three main research gaps are identified and addressed: (i) re-situating municipal planners' knowledge on climate change, (ii) understanding development actors' perspectives on adaptation, and (iii) developing relational accounts of planning practices under climate change uncertainties. In order to address these gaps, a mixed-method research is developed and implemented, providing a geographical practice that forges creative connections between socio-cultural and spatial-analytical geographies. Based on a case study analysis of the island province of Bohol in the singular archipelagic context of the Philippines, a dataset is built containing pre-constructed data (development planning documents, census data) and self-constructed data (in-depth interviews, survey questionnaires, mental maps) from the national, regional and local level. Both statistical and interpretive discourse analysis is performed, informed by quantitative and qualitative spatial-analytical methods.

Main results first highlight that development planning in the Philippines involves an important diversity of social actors engaged in both planned and autonomous adaptation processes. Then, further in-depth interviews with planning officers from the coastal municipalities in Bohol show that climate change has worked its way into a set of discourses that are beyond climate knowledge as brought about by

the institutional processes of mainstreaming climate change adaptation. Planning officers' understandings and engagements with climate change are built upon both scientific and non-scientific ways of knowing, offering a venue in which experiential knowledge on climate change can be used for building planning significance. Meanwhile, focusing on actors from both government and civil society organisations, results from a Q-method survey provide evidence that, while differentiated viewpoints may lead to divergent perspectives on adaptation, these perspectives hold commonalities suggesting that shared adaptation strategies can emerge across organisational structures and scales. Lastly, a combined analysis of the main research material collected using concepts from Actor-Network Theory (ANT) highlight that development planning's dominant modes of ordering tend to focus primarily upon the physical characteristics of places and struggles to adequately engage with spaces of heterogeneity and fluidity brought about by climate change uncertainties. Evidence are therefore provided for some amendment to planning processes so that more inclusive approaches, oriented towards topological conceptions of space, can be brought into being for improving climate change adaptation. Used increasingly to address issues pertaining to nature-society relationships, the continued used of mixed-method research mobilizing socio-cultural and spatial-analytical methods is supported as an insightful mode of enquiry able to capture the multiple realities of climate change.

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